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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,872

12/13/2004

Catherine Julia Piper

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1343

26748

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01/12/2009

SYNGENTA CROP PROTECTION, INC.  
PATENT AND TRADEMARK DEPARTMENT  
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EXAMINER

CHUI, MEI PING

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

01/12/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,872	<b>Applicant(s)</b> PIPER ET AL.	
	<b>Examiner</b> MEI-PING CHUI	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>N/A</u> .   | 6) <input type="checkbox"/> Other: _____                          |

***DETAILED ACTION***

***Status of Action***

- (1) Receipt of Amendments/Remarks filed on 12/15/2008 is acknowledged. Claims 1 and 8-10 have been previously amended and claim 7 has been previously cancelled.
- (2) Applicants' amendment, filed after first non-final Office action (mailed on 01/24/2008), necessitated the new ground(s) of rejection in that Office action.
- (3) Applicant's request for reconsideration of the finality of the rejection of the last Office action (mailed on 09/15/2008) is persuasive and, therefore, the finality of previously action is hereby vacated. However, upon further consideration, this new Office action is maintained final due to Applicants' amendment, filed after first non-final Office action, necessitated the new ground(s) of rejection.

***Status of Claims***

Accordingly, claims 1-6 and 8-12 are presented for examination on the merits for patentability.

Rejection(s) not reiterated from the previous Office Action are hereby withdrawn. The following rejections are either reiterated or newly applied. They constitute the complete set of rejections presently being applied to the instant application.

***New Grounds of Rejection***

***Claim Rejection - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

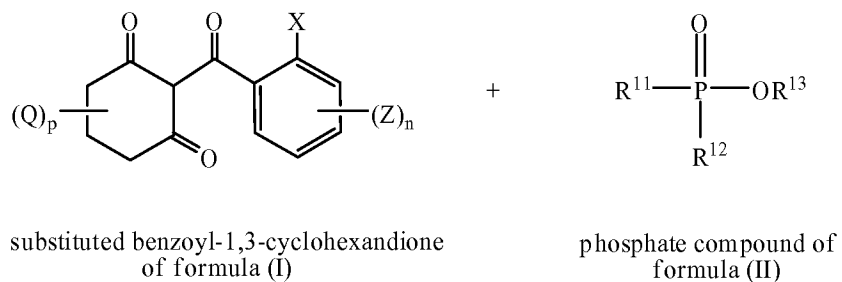
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**(1) Claims 1-6, 8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pallett et al. (WO 02/21919) in view of Johnson, R. R. (U. S. Patent No. 4,776,882).**

***Applicants claim***

Applicants claim a herbicidal composition comprising (i) a metal-chelate of a 2-(substituted benzoyl)-1,3-cyclohexanedione of formula (I) (see structure below) and (ii) an organic phosphate compound of formula (II) as an adjuvant (see structure below):

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wherein the substituted benzoyl-1,3-cyclohexanedione of formula (I) is 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione and the substituents R<sup>11</sup>, R<sup>12</sup> and R<sup>13</sup> of phosphate compound of formula (II) are all independently alkoxyl groups containing from 1 to 20 carbon atoms.

Applicants also claim a method of control of unwanted vegetable in a useful crop by applying a herbicidally effective amount of said composition.

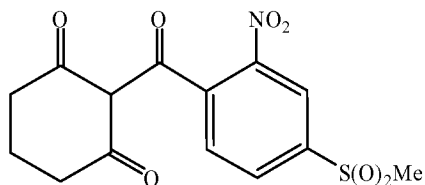
***Determination of the scope and content of the prior art***  
***(MPEP 2141.01)***

Pallett et al. teach a herbicidal composition comprising 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione or its metal complex (page 6, line 5) and ethoxylated tristyryl-phenol phosphate as adjuvant (page 3, line 12; page 8, line 18 and Example C1).

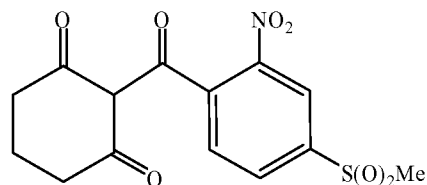
More specifically, Pallett et al. teach that 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione has a chemical structure (see below) as the claimed metal chelate compound:

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2-(substituted benzoyl)-1, 3-cyclohexanedione of formula (I), where  $X = \text{NO}_2$ ;  $Z = \text{S}(\text{O})_2\text{CH}_3$ ;  $p = 0$  and  $n = 1$ :



2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione (by Pallett et al.)



2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione (the claimed formula I)

Pallett et al. also teach a method for controlling the growth of weeds in crops-growing areas by applying to the locus of weeds an effective amount of herbicidal composition which comprises 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione or its metal complex, and additionally, a suitable phosphates adjuvant (page 1, lines 12-14 and page 4, lines 1-2 and compound formula (II)). Pallett et al. further teach that the herbicidal composition is used to selectively control the growth of weeds to a locus of weed infestation which is an area used for growing crops (page 3, line 24-28).

*Ascertainment of the difference between the prior art and the claims*

*(MPEP 2141.02)*

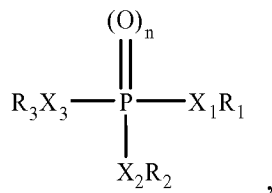
Pallett et al. teach a herbicidal composition comprising the claimed 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione or its metal complex (page 6, line 5) and a phosphate as adjuvant, Pallett et al. also teach a method of applying said composition for controlling the growth of weeds in crops-growing areas. However, Pallett et al. do not teach the

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claimed phosphate adjuvant, which substituents are independently alkoxy groups containing from 1 to 20 carbon atoms., but this deficiency is cured by the teaching of Johnson, R. R.

Johnson, R. R. teaches a composition comprising a penetrant-carrier in combination with a biocide, i.e. a herbicide, for controlling the growth of undesired woody plants, regulate the growth of said plants (column 1, line 66 through column 2, line 5). Johnson, R. R. teaches that the penetrant-carriers are effective in eliminating the necessity of transporting large volumes of expensive fuel oil to the use site, and when use with herbicides of limited soil activity, the penetrant-carriers can also help eliminating or reducing potential injury to off-target vegetation (column 1, lines 50-63).

Johnson, R. R. then teaches that the penetrant-carriers are a compound of phosphorus having the formula as follows:



wherein X<sub>1</sub>, X<sub>2</sub> and X<sub>3</sub> can be oxygen; n = 1; R<sub>1</sub>, R<sub>2</sub>, and R<sub>3</sub> can be C<sub>1</sub>-C<sub>10</sub> alkyl groups (column 2, lines 13-29). Preferably, the penetrant-carriers are trialkylphosphates, i.e. tributylphosphate and tri(2-ethylhexyl)phosphate (column 2, lines 50-65).

***Finding of prima facie obviousness Rational and Motivation***

***(MPEP 2142-2143)***

It would have been obvious to a person of ordinary skilled in the art at the time the invention was made to combine the teaching of Pallett et al. and Johnson, R. R. to arrive at the instant invention.

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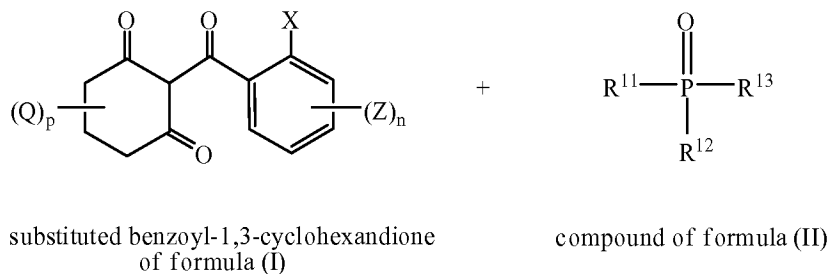
One of ordinary skill would have been motivated to try other phosphate adjuvant, i.e. an alkoxylated phosphate, which can help to improve herbicidal effect and reducing injury to other vegetation when combining with a herbicide, as taught by Johnson, R. R.

From the teaching of the reference, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**(2) Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pallett et al. (WO 02/21919) in view of Goyette, L. E. (U. S. Patent No. 2,927,014).**

### *Applicant Claims*

Applicants claim a herbicidal composition comprising (i) a metal-chelate of a 2-(substituted benzoyl)-1,3-cyclohexanedione of formula (I) (see structure below) and (ii) an organic phosphonate or phosphinate compound of formula (II) as an adjuvant (see structures below):



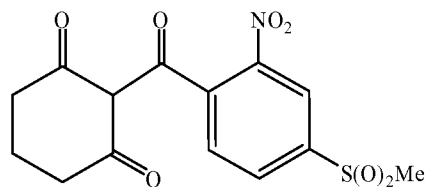
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wherein the compound of formula (II) can be a phosphate, or the compound of formula (II) can be a phosphonate which substituents  $R^{11}$  and  $R^{12}$  are alkoxy groups, and  $R^{13}$  is an alkyl or substituted phenyl group, or the compound of formula (II) can be a phosphinate, which substituents  $R^{11}$  is an alkoxy group,  $R^{12}$  and  $R^{13}$  are both alkyl or substituted phenyl groups.

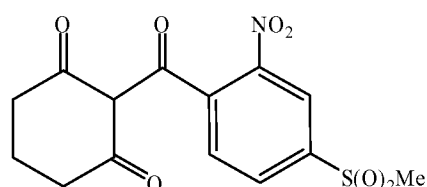
***Determination of the scope and content of the prior art***  
***(MPEP 2141.01)***

The teaching of Pallett et al. has been set forth above. Essentially, Pallett et al. teach a herbicidal composition comprising 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione, or its metal complex and a phosphate as adjuvant (page 3, line 12 and page 6, line 5).

More specifically, Pallett et al. teach that 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione has a chemical structure (see below) as the claimed metal chelate compound: 2-(substituted benzoyl)-1, 3-cyclohexanedione of formula (I), where  $X = NO_2$ ;  $Z = S(O)_2CH_3$ ;  $p = 0$  and  $n = 1$ :



2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione (by Pallett et al.)



2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione (the claimed formula I)

Pallett et al. also teach a method for controlling the growth of weeds in crops-growing areas by applying to the locus of weeds an effective amount of herbicidal composition which comprises 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione or its metal complex,

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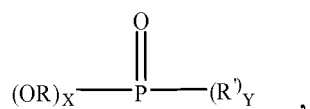
and additionally, a suitable phosphates adjuvant (page 1, lines 12-14 and page 4, lines 1-2 and compound formula (II)). Pallett et al. further teach that the herbicidal composition is used to control selectively the growth of weeds to a locus of weed infestation which is an area used for growing crops (page 3, line 24-28).

*Ascertainment of the difference between the prior art and the claims*

*(MPEP 2141.02)*

Although Pallett et al. teach the herbicidal composition that comprises a 2-(substituted benzoyl)-1,3-cyclohexanedione of formula (I), i.e. 2-(2'-nitro-4'-methylsulfonylbenzoyl)-1,3-cyclohexanedione and a phosphate adjuvant, Pallett et al. do not teach the use of another equivalent phosphorus adjuvants in the herbicidal composition. However, the deficiency is cured by the teaching of Goyette, L. E.

Goyette, L. E. teaches a method of applying phosphorus compounds of general formula (see below) for controlling the growth of undesirable plants (column 1, lines 15-16; column 2, lines 39-40):



wherein the substituents R and R' of the formula represent an alkyl or substituted aryl group, and if the compound is a phosphonate, then X = 2 and Y = 1, or if the compound is a phosphinate, then X = 1 and Y = 2 (column 2, lines 41-53).

More specifically, Goyette, L. E. teaches that the phosphonate compound is dialkyl alkylphosphonate, i.e. the one where the R-groups are 2-ethylhexyl and R' group is an ethyl

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group (Table II compound No. 9), and the phosphinate where the R group is an ethyl group and R' groups are 2-ethylhexyl (Table III: compound 27).

Goyette, L. E. also teaches that both the phosphonate and the phosphinate possess herbicidal activity and are capable of killing germinating seeds, seedlings and plants, including all forms of mature and immature plants (column 2, lines 54-60 and column 3, lines 1-3).

***Finding of prima facie obviousness Rational and Motivation***

***(MPEP 2142-2143)***

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Pallett et al. and Goyette, L. E. to arrive at the instant invention.

One of ordinary skill would have been motivated to substitute the phosphate adjuvant with the phosphonate, or the phosphinate, because the phosphonate and the phosphinate both possess herbicidal activity; and therefore, when it is used in combination with a herbicide, i.e. a 2-(substituted benzoyl)-1,3-cyclohexanedione compound, it can help to enhance the herbicidal effect of the cyclohexanedione compound for controlling the growth of unwanted vegetations, as taught by Goyette, L. E.

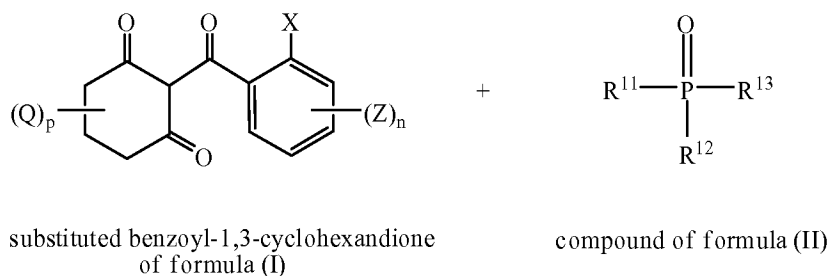
From the teaching of the reference, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

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**(3) Claims 1-6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scher et al. (U. S. Patent No. 5,912,207) in view of Goyette, L. E. (U. S. Patent No. 2,927,014).**

*Applicant Claims*

Applicants claim a herbicidal composition comprising (i) a metal-chelate of a 2-(substituted benzoyl)-1,3-cyclohexanedione of formula (I) (see structure below) and (ii) an organic phosphate, phosphonate or phosphinate compound of formula (II) as an adjuvant (see structure below):



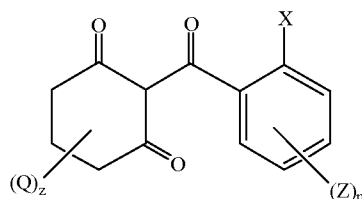
wherein when the compound of formula (II) is a phosphate, the  $R^{11}$ ,  $R^{12}$  and  $R^{13}$  substituents are alkoxy groups containing from 1 to 20 carbon atoms, or when the compound of formula (II) is a phosphonate, the substituents  $R^{11}$  and  $R^{12}$  are alkoxy groups and  $R^{13}$  is an alkyl or substituted phenyl group, or when the compound of formula (II) is a phosphinate, the substituents  $R^{11}$  is an alkoxy group,  $R^{12}$  and  $R^{13}$  are both alkyl or substituted phenyl groups.

***Determination of the scope and content of the prior art***  
***(MPEP 2141.01)***

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Scher et al. teach a herbicidal formulation comprising a metal chelate herbicide and a phosphate as an adjuvant that provides the source of the metal ion (column 1, line 3-5 and column 7, line 57).

Scher et al. teach that the structure of the herbicidal metal chelate compound preferably is a 2-(substituted-benzoyl)-1,3-cyclohexanedione of formula (II) (see structure below):



wherein **X**: represents a halogen atom; a straight- or branched-chain alkyl or alkoxy group containing up to six carbon atoms which is optionally substituted by one or more groups  $-OR^{15}$  or one or more halogen atoms; or a group selected from nitro, cyano,  $-CO_2R^{16}$ ,  $-S(O)_mR^{15}$ ,  $-O(CH_2)_rOR^{15}$ ,  $-COR^{16}$ ,  $-NR^{16}R^{17}$ ,  $-SO_2NR^{16}R^{17}$ ,  $-CONR^{16}R^{17}$ ,  $-CSNR^{16}R^{17}$  and  $-OSO_2R^{18}$  (for **X**: see column 4, line 21-28; for  $R^{15}$ - $R^{18}$ : see column 4, line 28-38);

**Z**: each independently represents halo, nitro, cyano,  $S(O)_mR^{16}$ ,  $OS(O)_mR^{16}$ ,  $(C_1-C_6)$ alkyl,  $(C_1-C_6)$ alkoxy,  $(C_1-C_6)$ haloalkyl,  $(C_1-C_6)$ haloalkoxy, carboxyl,  $(C_1-C_6)$ alkylcarbonyloxy,  $(C_1-C_6)$ alkoxycarbonyl,  $(C_1-C_6)$ alkylcarbonyl, amino,  $(C_1-C_6)$ alkylamino,  $(C_1-C_6)$ dialkylamino having independently the stated number of carbon atoms in each alkyl group,  $(C_1-C_6)$ alkylcarbonylamino,  $(C_1-C_6)$ alkoxycarbonylamino,  $(C_1-C_6)$ alkylaminocarbonylamino,  $(C_1-C_6)$ dialkylaminocarbonylamino having independently the stated number of carbon atoms in each alkyl group,  $(C_1-C_6)$ alkoxycarbonyloxy, and the remaining substituents as recited therein (for **Z**: see

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column 4, line 39-54; for  $R^7$ : see column 4, line 7-8, and for  $R^8$ : see column 4, line 9-14);  
and  $R^2$  represents cyano,  $-COR^7$ ,  $-CO_2R^7$  or  $-S(O)_mR^8$  (column 3, line 25);

**Q:** each independently, represents  $C_1$ - $C_4$  alkyl or  $-CO_2R^a$  wherein  $R^a$  is  $(C_1$ - $C_4)$  alkyl  
(column 5, line 28-30 and column 5, line 29-30);

**z:** is 0 or an integer from 1 to 6 (column 5, line 30);

**m:** is 0, 1 or 2 (column 2, line 55);

**n:** is 0 or an integer from 1 to 4 (column 2, line 56);

**r:** is 1, 2 or 3 (column 2, line 59).

It is noted that the substituents of the metal-chelate herbicide formula (I) taught by Scher et al. and the substituents of 2-(substituted-benzoyl)-1, 3-cyclohexanedione formula (II) are the same in that:

<u>Substituent (Scher et al.)</u>	<u>Substituent (instant claims)</u>
$R^2$	$R^5$
$R^7$	$R^6$
$R^8$	$R^7$
$(C_1$ - $C_4)$ alkyl	$R^8$
$R^{15}$	$R^1$
$R^{16}$	$R^2$
$R^{17}$	$R^3$
$R^{18}$	$R^4$
$R^a$	$R^9$

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Scher et al. also teach that the phosphate salt compound is particularly suitable as a source to provide a divalent or trivalent metal ion for forming the metal chelating with 2-(substituted-benzoyl)-1, 3-cyclohexanedione compound (column 7, line 53-57).

Scher et al. also teach that the preferred 2-(substituted-benzoyl)-1, 3-cyclohexanedione compound of formula (II) comprises substituents, where the substituent **X** is chloro, bromo, nitro, cyano, C<sub>1</sub>-C<sub>4</sub> alkyl, -CF<sub>3</sub>, -S(O)<sub>m</sub>R<sup>15</sup> or -OR<sup>15</sup> (column 6, line 12-13).

Scher et al. further teach that the substituent **Z** is independently chloro, bromo, nitro, cyano, (C<sub>1</sub>-C<sub>4</sub>) alkyl, -CF<sub>3</sub>, -OR<sup>15</sup>, -OS(O)<sub>m</sub>R<sup>2</sup> or S(O)<sub>m</sub>R<sup>2</sup> for the preferred 2-(substituted benzoyl)-1,3-cyclohexanedione compound of formula (II) (column 6, line 14-16) and **n** is 1 or 2, and **z** is 0 (column 6, line 12 and 14).

In addition, Scher et al. teach that the preferred cyclohexanedione compounds are 2-(2'-nitro-4'-methylsulphonylbenzoyl)-1, 3-cyclohexanedione, 2-(2'-nitro-4'-methylsulphonyloxybenzoyl)-1, 3-cyclohexanedione and 2-(2'-chloro-4'-methylsulphonylbenzoyl)-1, 3-cyclohexanedione (column 6, line 16-20).

Scher et al. teach that the herbicidal formulation, which containing the metal-chelate cyclohexanedione compound of formula (I), can be applied directly to an area where control of undesired vegetation is located (column 8, line 28-31).

***Ascertainment of the difference between the prior art and the claims***

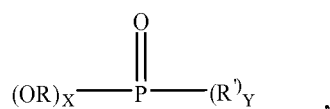
***(MPEP 2141.02)***

Scher et al. teach a herbicidal composition comprising the claimed herbicide in combination with a phosphate adjuvant, Scher et al. do not teach the use of other equivalent

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phosphorus adjuvants, i.e. phosphonate or phosphinate. However, the deficiency is cured by the teaching of Goyette, L. E.

Goyette, L. E. teaches a method of applying phosphorus compounds of general formula (see below) for controlling the growth of undesirable plants (column 1, lines 15-16; column 2, lines 39-40):



wherein the substituents R and R' of the formula represent an alkyl or substituted aryl group, and when the compound is a phosphonate, then X = 2 and Y = 1, or if the compound is a phosphinate, then X = 1 and Y = 2 (column 2, lines 41-53).

More specifically, Goyette, L. E. teaches that the phosphonate compound is dialkyl alkylphosphonate, i.e. the one where the two R-groups are 2-ethylhexyl and R'-group is an ethyl group (Table IL compound No. 9), and if it is the phosphinate compound, the R group is an ethyl group and R' groups are 2-ethylhexyl (Table III: compound 27).

Goyette, L. E. also teaches that both the phosphonate and the phosphinate possess herbicidal activity and are capable of killing germinating seeds, seedlings and plants, including all forms of mature and immature plants (column 2, lines 54-60 and column 3, lines 1-3).

***Finding of prima facie obviousness Rational and Motivation***

***(MPEP 2142-2143)***

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Scher et al. and Goyette, L. E. to arrive at the instant invention.

One of ordinary skill would have been motivated to substitute the phosphate adjuvant with a phosphonate or a phosphinate, and expects a similar and successful result because both the phosphonate and the phosphinate both possess herbicidal activity, and therefore, when it is used in combination with a herbicide, i.e. a 2-(substituted benzoyl)-1,3-cyclohexanedione compound, it can further enhance the herbicidal effect of the cyclohexanedione compound for controlling the growth of unwanted vegetations, as taught by Goyette, L. E.

From the teaching of the reference, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### ***Conclusion***

No claims are allowed.

Applicant's amendment filed after first non-final Office action necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Contact Information***

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Thursday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the

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PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/H. C./

Examiner, Art Unit 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616